

## ABSTRACT

### **Process and device for communication with a redundant system**

The invention relates to a process and a device for communication with a redundant system. A redundant system is a system comprising duplicate physical entities, forming groups of redundant physical entities. These physical entities may be routers or communication lines for example. In each group of redundant physical entities, a physical entity is active, the other entity or entities are inactive. Means for managing the redundancy controlling the switching of said physical entities from an active to an inactive state.

According to the invention:

- each physical entity is allocated a physical identifier;
- each group of physical entities is allocated a logical identifier;
- the management means are communicated with in order to determine the active physical entities;
- the physical identifier of the active entity is associated with each logical identifier;
- the messages of an application are transmitted to the redundant system, substituting each logical identifier with the associated physical identifier;
- the messages of the redundant system are transmitted to the application, substituting each physical identifier with the associated logical identifier.

The invention applies in particular in respect of the processing of air traffic management information. More generally, it applies in respect of any system for routing complex digital data requiring highly dependable operation.

Figure 3